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## A Preliminary Study of the Tempos Used by Preschool Children in the Three Rhythms - Walking, Running, and Skipping

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According to the method of constant stimuli, a large number of judgments is required on a few selected distances. The standard stimulus is an illuminated circular area twelve centimeters in diameter at a distance of five meters from the eye. Two hundred fifty judgments, fifty each for five distances both above and below the standard, are required for the determination of each of the seven limens which are to be compared. The series are as follows: Series 1 — the determination of the distance limen at five meters, using two stimuli of equal size, the standard size; Series 2 — the determination of the distance limen at five meters, the standard circle always being compared with another of slightly different size, 11.5 cm. and 12.5 cm. respectively; Series 3 — the determination of the distance limen at five meters, the stimuli being of the standard size, but one of each pair being presented slightly off-center, above and below, toward the center, and away from it; Series 4 — the determination of the limen for size at a distance of five meters.

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## A PRELIMINARY STUDY OF THE TEMPOS USED BY PRESCHOOL CHILDREN IN THE THREE RHYTHMS — WALKING, RUNNING, AND SKIPPING

EVA LEAH HULSON

A preliminary study was undertaken to find out at what tempos young children from four to five years of age are best able to walk, run, and skip in concert with music — in this case appropriate music played on the piano. It was carried on with a group of about twenty children from four to five years old from the Iowa Child Welfare Research Station. It was performed under group conditions — all of the children being present during the testing periods. For this study, sixteen measures of music — chosen because of its suggestiveness as well as for its simplicity — were played by an adult at designated tempos while a second adult observed a group of three or four children as they responded to the music. Eight consecutive steps were arbitrarily chosen as being the minimum upon which a child could be judged as being able to keep the rhythm. Three methods were used for gathering the data for this study, (1) without instruction in order to get the children's first response to the music, followed by (2) verbal in-

struction, and (3) without music, using stop-watch, to get the children's natural rates.

Owing to the fact that metronome tempos are not graded in regular series, only average numbers or peaks on each tempo are possible. The results seem to show that even with a limited number of cases, there is a quite definite trend for each rhythm and it would seem legitimate to suggest, judging from the data, that beginning tempos in rhythm for young children from 4-5 years of age when they enter such a group as this, might well be started at the tempos shown by these peaks and later the faster and slower tempos used to advantage.

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## A RATING SCALE FOR THE STUDY OF SOCIAL BEHAVIOR IN YOUNG CHILDREN

ESTHER VAN CLEAVE

The social behavior of fifty children from one to five years of age was observed and analyzed for traits that should make up a rating scale for measuring social behavior in young children. The results of the analysis were compared with certain child behavior traits, called by Norsworthy and Whitley, "social" and "non-social" instincts; by Watson, "emotions"; by Bolton, "social traits," and by Gambrill, "social attitudes." A preliminary graphic rating scale of twenty-six traits has been replaced by a more complete scale of thirty traits. The scale has five divisions extending from a decidedly high degree of the trait to a decided lack of the trait. At least three raters make ratings on each child.

Four series of tests have been constructed to test interest in other children, coöperation, obedience and respect for other's property rights. These tests are situations similar to those observed in the playroom. Children and toys are parts of the test materials.

During the 1926 summer session of the Preschool Home Laboratory, two sets of ratings, at an interval of one month, were made for a group of children. A comparison of the two sets of ratings shows that the children increased in seeking approbation, affection, friendliness, sympathy, rivalry, sense of humor, responsiveness to group control, leadership, imitation, teasing, maternal behavior, jealousy, self-defense, criticism, and politeness. In 388 of the 728 judgments of the raters, two ratings were identical, while a third